

REPORT / RECOMMENDATION



To: Mayor and City Council

Agenda Item #: VIII.C.

From: Ann Kattreh
Parks & Recreation Director

Action ☒
Discussion ☐
Information ☐

Date: February 18, 2014

Subject: Sports Dome, Outdoor Rink and Arena Improvements Budget Estimate Update and Bid Authorization

Action Requested:

Provide project design direction on Sports Dome, outdoor rink and arena project based on increased project cost estimates. Based on project design direction, provide authorization for advertisement of bid package one for Sports Dome, outdoor rink and arena project.

Information / Background:

On October 14, 2013 the City Council directed staff to begin the design phase of the Sports Dome, outdoor refrigerated rink and arena improvements (Braemar project) at Braemar Arena and the Braemar athletic field. Staff has retained Cuningham Group architects, and RJM as construction manager. As design progressed, soil conditions evaluated and code compliance issues addressed, several factors have been identified which are expected to increase the project cost by approximately \$2 million. Please see attached RJM Construction Budget Summary.

Paul Kolias, RJM Construction, and Kathy Wallace, Cuningham Group, will be at the City Council meeting to answer questions. If the council is interested in cutting costs for the Braemar portion of the project, the elimination of the outdoor refrigerated rink would save approximately \$1.5 million. Since the east arena's R-22 refrigeration system needs to be replaced by 2020, it is important that the new ammonia system for the east arena be replaced as part of this project. The site of the outdoor rink could be prepped but the outdoor refrigeration, boards and roof could be postponed.

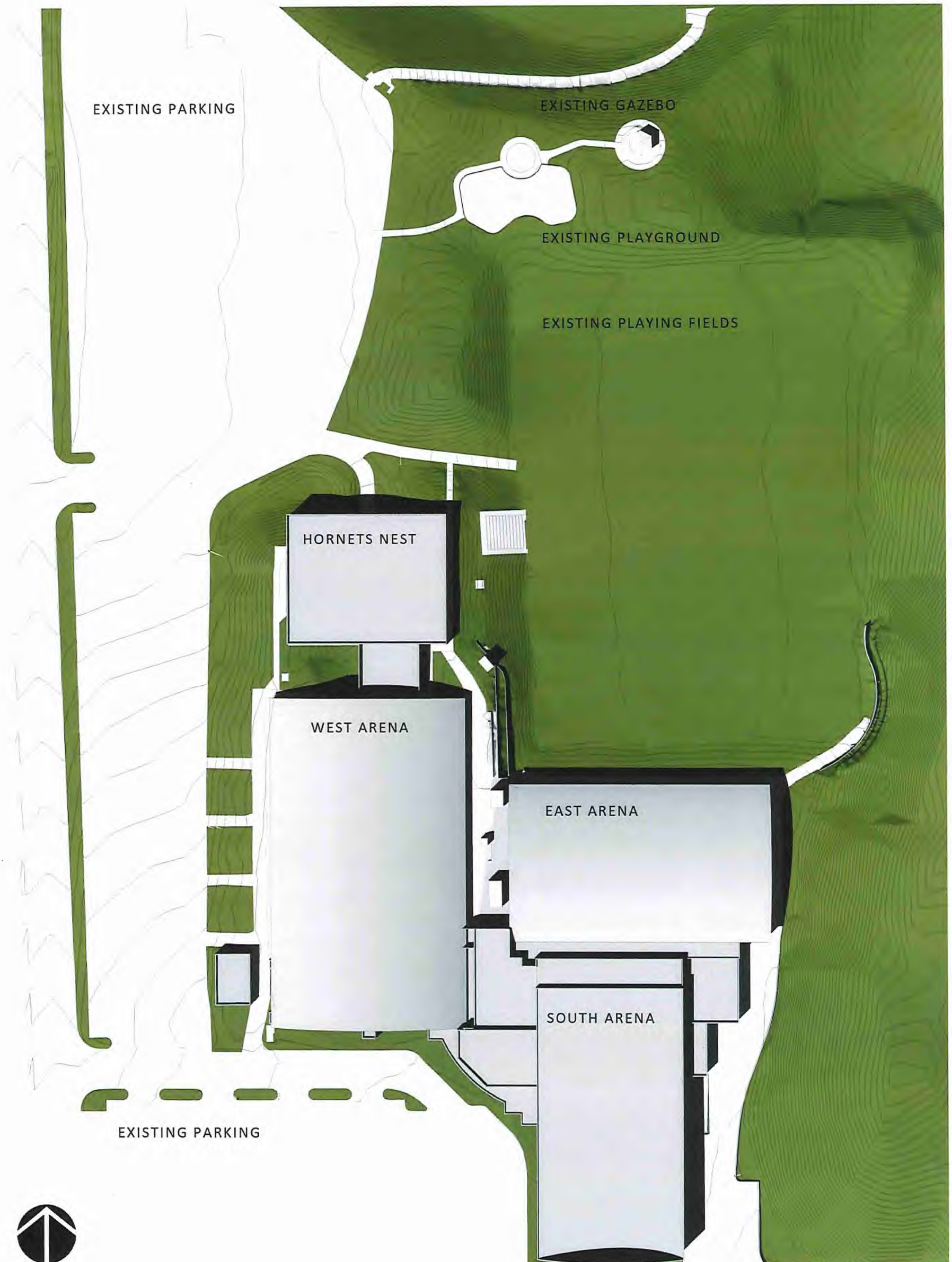
The Pamela Park renovation project is still in the design phase and cost estimates have not been obtained. Staff has identified a potential site improvement and cost saving proposal for Pamela Park. Staff will propose to slightly increase the size of the lighted artificial turf field, eliminating the need for the new sand peat field. This will significantly increase the amount of use for the artificial turf with just increasing the artificial turf field from approximately 225' x 380' to 250' x 380'. The location of the proposed "new" sand peat field is currently uneven and dangerous for athletics. Instead of adding a new sand peat field, this site could be graded, re-seeded and irrigated to provide a high quality multipurpose grass field space (similar to Highlands Park fields) for athletic and neighborhood use.

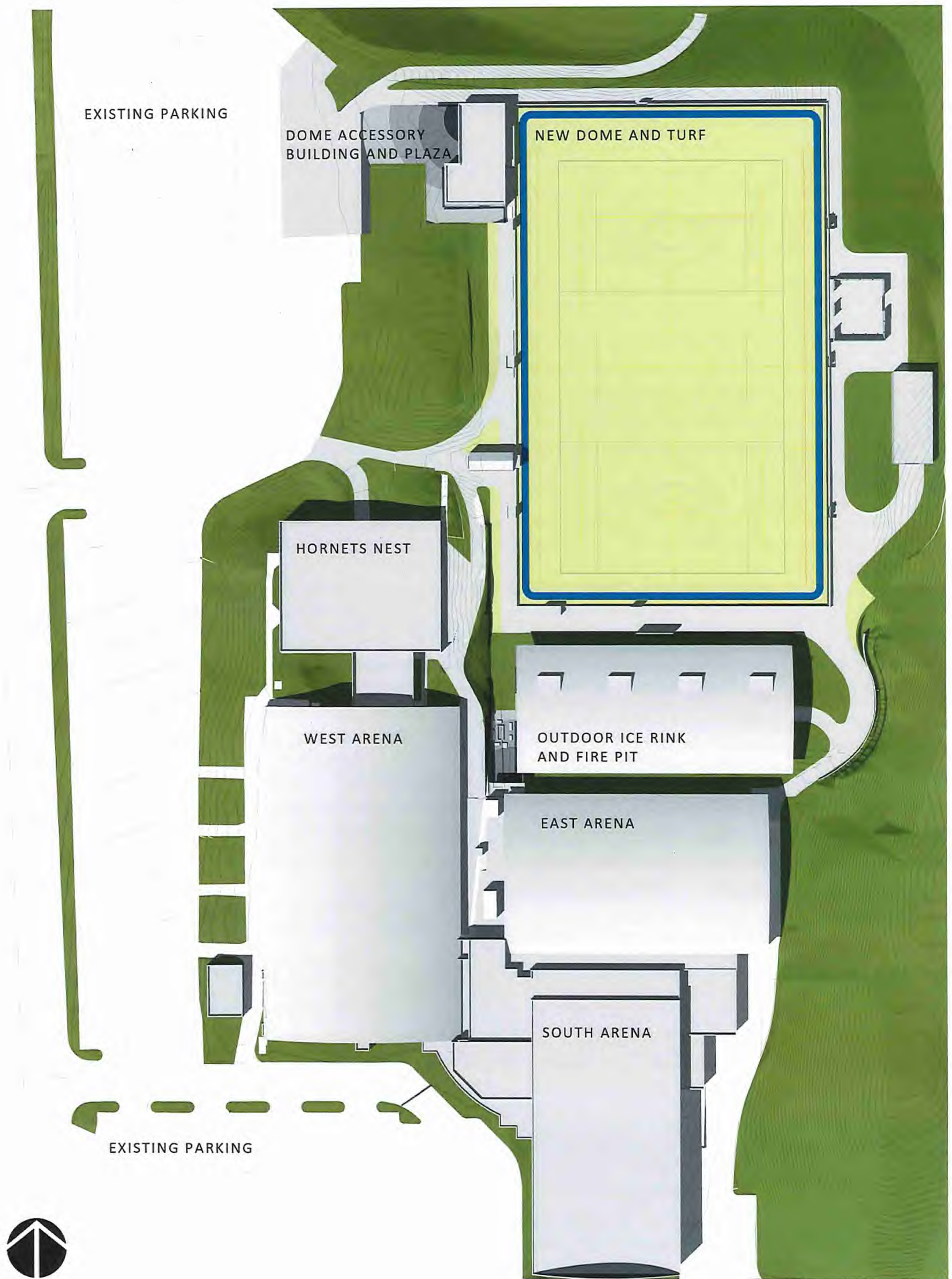
In order to keep the Braemar project on track for a November/December 2014 opening, staff requests that the council authorize bid package one for advertisement. Bid package one will contain items that have long lead times, particularly for manufacturing. Staff and consultants will adjust the scope of the project based on council's decision tonight regarding the increased budget estimate and project scope and design. Staff will continue to work with RJM on the construction schedule, but the additional site work at Braemar is expected to delay the project completion by approximately one month to December 5, 2014. The schedule will be tightened wherever possible to open the facilities as soon as possible.

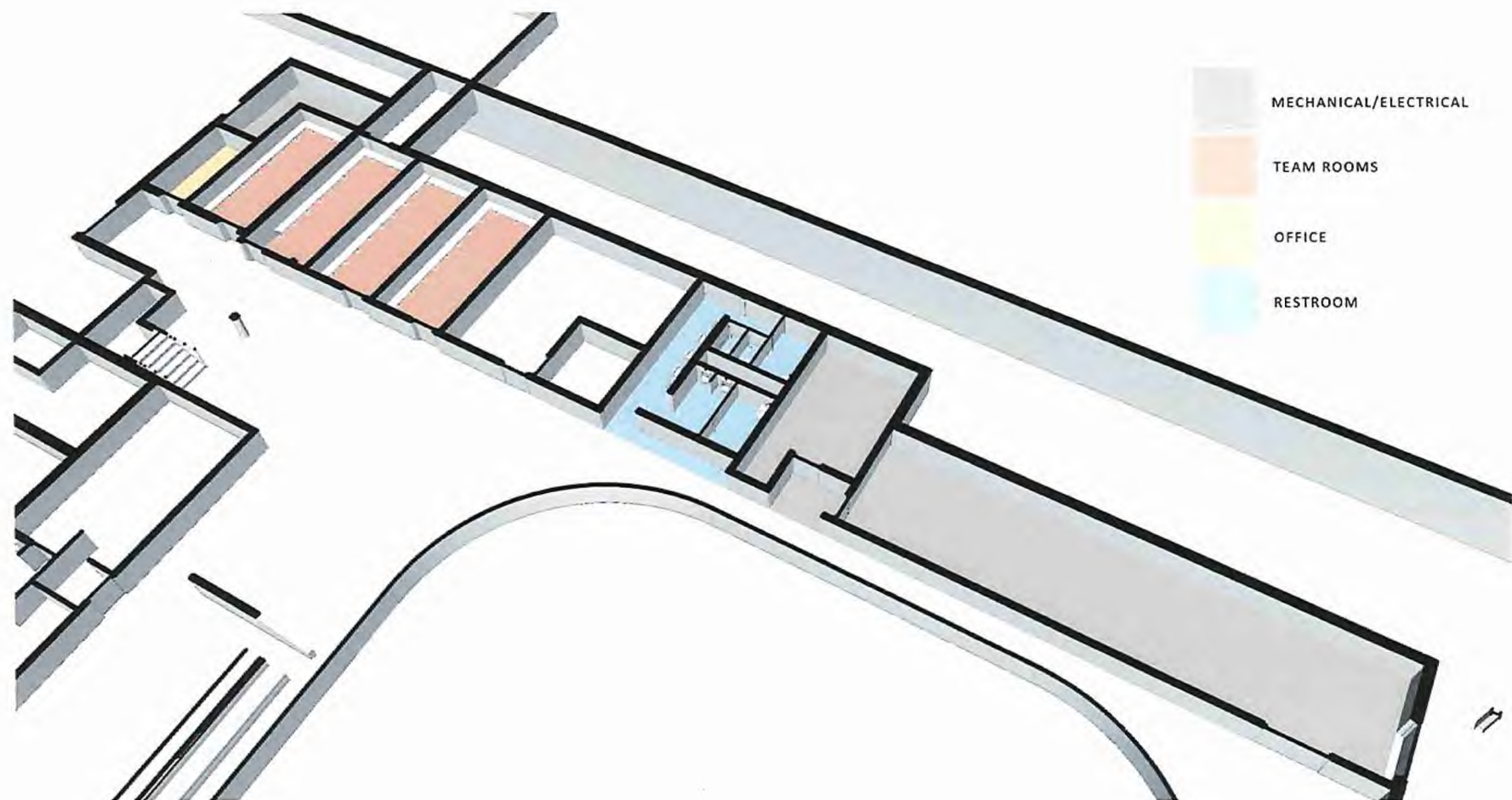
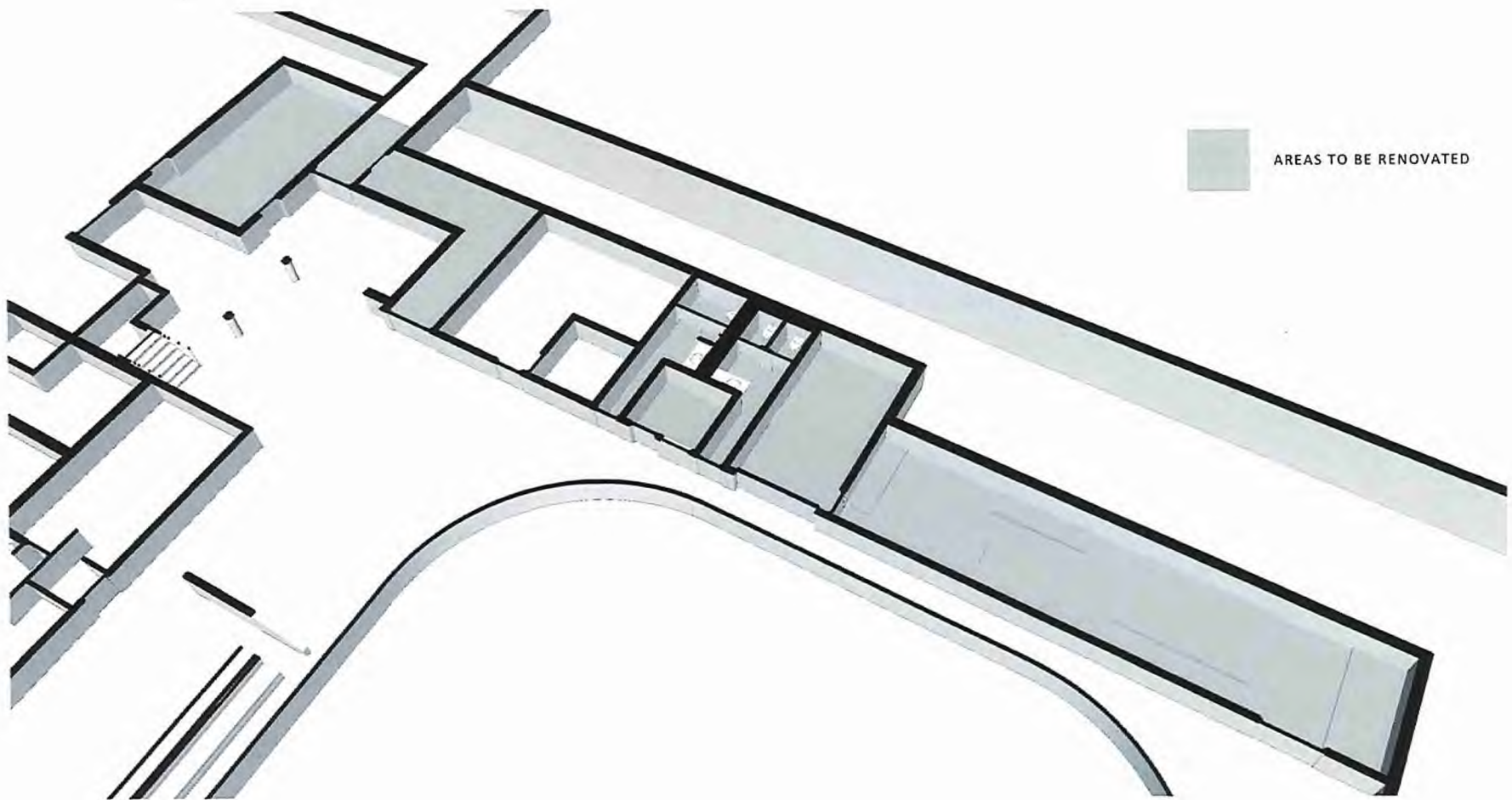
The City of Edina received a \$250,000 Hennepin Youth Sports Grant for the Sports Dome. This grant is not included in the project budget.

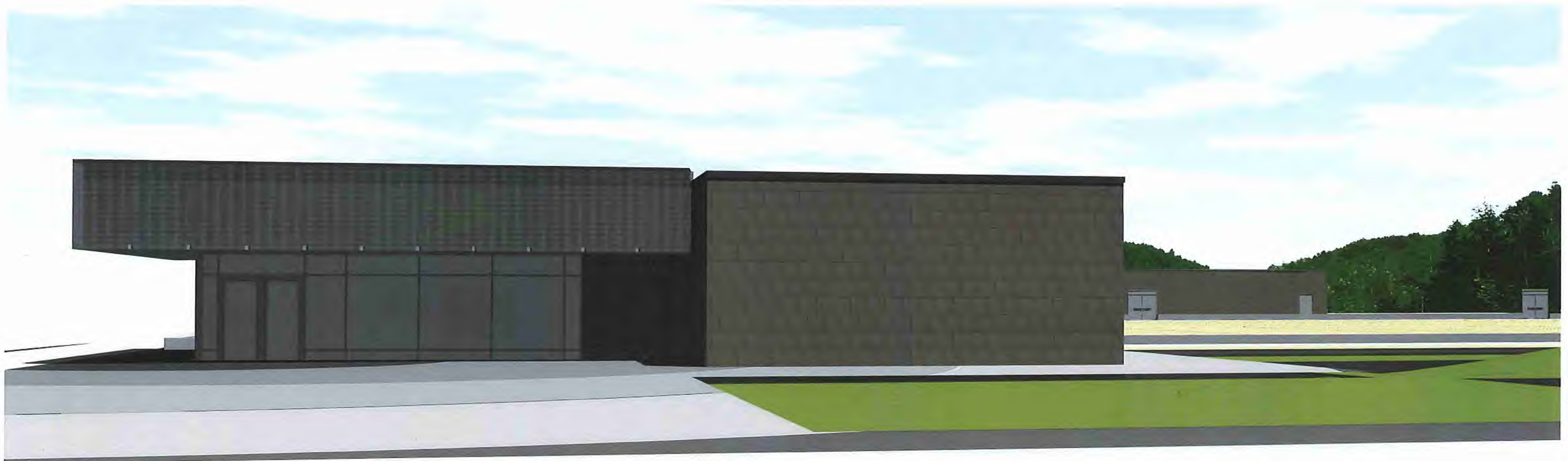
Attachments:

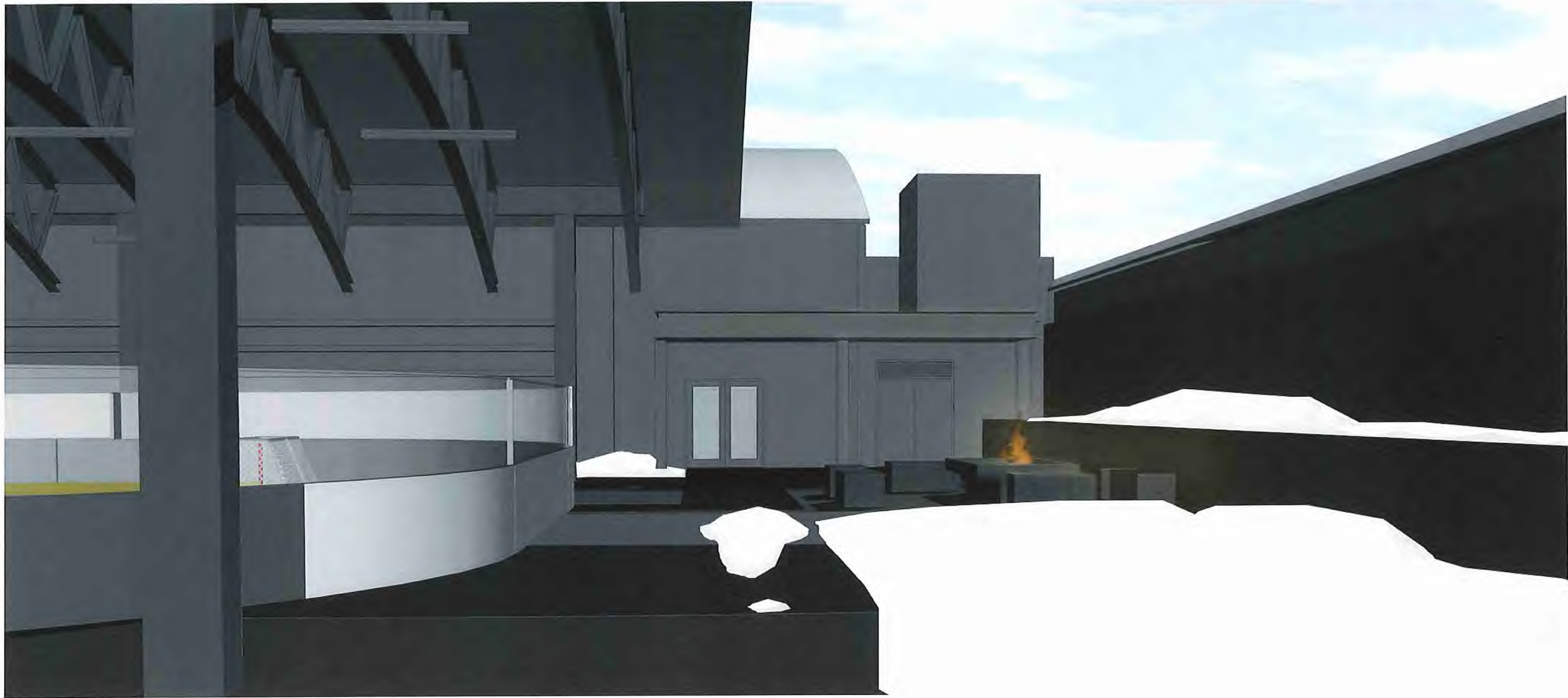
Braemar Site Diagram
Braemar Site Improvement Plan
Arena Renovation Plan
Accessory Building Rendering
East Arena Entry and Fire Pit Rendering
Outdoor Rink Rendering
Construction Budget Summary
Conceptual Estimate Summary
Detailed Construction Cost Breakdown
October 8, 2013 Project Estimate
Preliminary Construction Schedule
Updated Pamela Site Plan









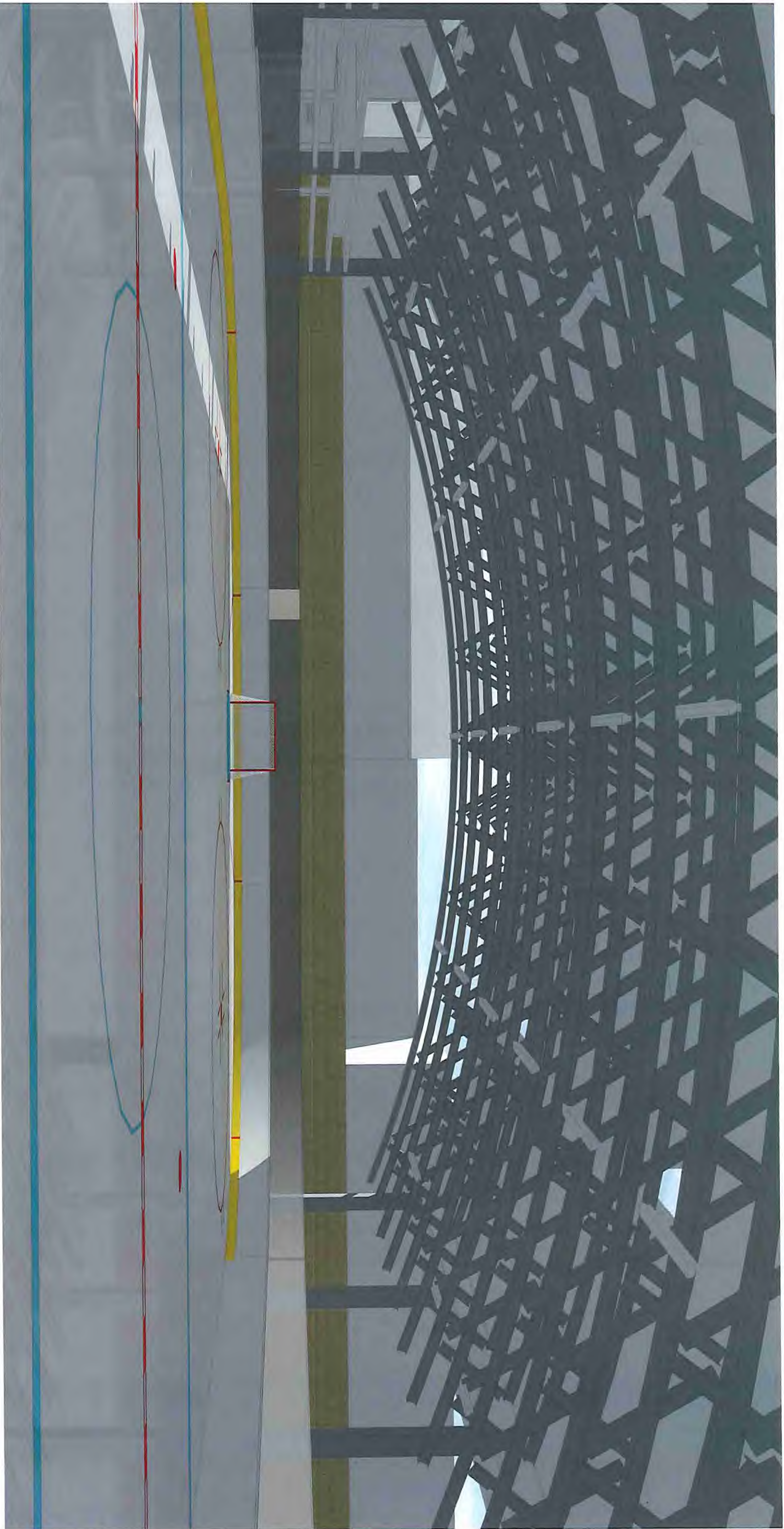


Edina Sports Dome and Outdoor Ice Rink/ View from Dome Facing the East Arena Entry and Firepit

EDINA MN

WEDNESDAY 12, 2014

CUNINGHAM
G R O U P



Edina Sports Dome and Outdoor Ice Rink/Ice Rink

EDINA MN

WEDNESDAY 12, 2014

CUNNINGHAM
G R O U P



CONSTRUCTION

Construction Budget Summary

MINNEAPOLIS OFFICE
701 Washington Avenue North #600
Minneapolis, Minnesota 55401
952-837-8600

TO: Ann Kattreh
Parks and Recreation Director
City of Edina
FROM: Paul Kolas
DATE: February 12, 2014
RE: Edina Sports Dome Construction Budget Summary

This is a brief summary outlining the estimate changes to the Edina Sports Dome Project since the initial estimate dated 10-8-13 (attached). Since this estimate we have received complete site survey, soil boring logs and preliminary soils report, and have had discussions and meetings with the City Building Department. These documents, discussions and meetings have impacted the initial estimate.

Also attached is our current design development estimate and detailed construction cost breakdown dated 2-12-14. These estimates are based on development of the current facility size, components and location on site. The values that have been established are conceptual in nature, providing anticipated magnitude of costs based on design development plans prepared by Cuningham Architects and their consultants.

At this time the project is over the initial estimate/budget dated 10-8-13 in the amount of \$2,066,817 (total project estimate). An exact comparison of the two estimates is difficult because the recent estimate is more detailed. However, there have been significant cost increases in two of the major project components: East Arena Ice Equipment and Site Work.

The largest impact to the project has been the increase in site work. Site work cost increases are due to the following:

- required soil correction at the existing soccer field
- additional access roads around the dome, requiring additional retaining walls
- expanded area of site work for increased separation of structures
- raised grades to accommodate proper ADA access to the East Arena and Sports Dome Accessory Building
- partial renovation of existing west parking lot to accommodate access

These items contribute to the \$1,746,507 construction cost difference in Site Work between the initial estimate and the current one; see Site Work column on the Detailed Construction Cost Breakdown. The soil corrections have also impacted the schedule; due to the need to excavate and replace soils the project schedule is extended by four weeks. Final completion of the project is set for December 5, 2014.

The East Arena Ice Equipment component includes the work to replace the refrigeration equipment for the existing East Arena rink (for ammonia refrigerant), and enlarge it to handle the outdoor ice sheet. The cost increases are due to un-anticipated equipment material cost increases and the need to relocate

and upgrade the existing electric service. The relocation is needed in order to allow room for the new ice equipment within the existing mechanical equipment room. The equipment cost increase and needed electrical service (and space) improvements total approximately \$650,293 (construction cost).

The other project components are under the initial conceptual estimate set, as a group, by \$649,255 (construction cost), but do include some increases in scope. First, the projected dome cost includes Tedlar coating for longevity and an additional liner for energy efficiency. Second, the Outdoor Ice Sheet roof canopy is required to be non-combustible, so costs for a metal roof and heavier structural steel is included.

Owner costs: The total increase between the initial estimate and the current estimate also includes \$319,272 in Owner costs, fees and non-construction contingencies, which mostly increase in proportion to expanded scope/cost. The Owner Contingency line-item (4% of estimated construction cost) is to offset any increase in Owner soft costs that come up through the life of the project. The Design Contingency line-item is 4% of estimated construction cost, typical for this phase of design, and is intended to absorb design changes not estimated that come up during final development of documents. Both of these are not fixed and could potentially be reduced. The third contingency, Construction contingency (for hidden conditions or other unexpected costs during the construction process) is addressed in the Total Construction Cost line item.

Soil Corrections: A brief explanation of the required soil correction: the soil information obtained in November indicates a significant amount of buried debris in various areas under the soccer field. Several test pits were dug to determine the extent of the debris and condition of surrounding soils. Braun Intertec reported that soils in which the debris was found are not contaminated and the debris found was found to have been placed in a controlled manner. With these findings Braun Intertec recommended two options to deal with the buried debris: remove all debris from the site at a cost of \$250,000 or sub-cut the site 5', re-compact the subgrade soils and place existing soils back in-place at a cost \$112,000. This sub-cut and placing of existing soils creates a 'bridge' over the debris and allows the use of conventional spread footings for the foundation systems being used on the project. The 5' sub-cut approach is included in the current estimate.

Scope-Reduction Option: One option to bring project closer to budget would be delete the portion of the work associated with the Outdoor Ice Sheet, specifically the East Arena Renovation (team rooms, toilets) and Outdoor Ice Sheet and roof. The value of the two components is \$1,589,651. This approach would still include the ammonia refrigeration infrastructure and the soil corrections to allow the outdoor ice sheet to be installed at a later date. Should this option be considered and constructed at a later date, the cost would be expected to increase, both for escalation (at this time cost escalation is 1% per month for the remainder of 2014), and due to greater constraints for construction.

By considering the option above the Total Project Estimate amount would adjust down to \$10,855,766, approximately \$477,000 above the conceptual estimate dated 10-8-13 of \$10,378,600.



Conceptual Estimate Summary

CONCEPTUAL ESTIMATE SUMMARY

ESTIMATE DATE:	February 12, 2014
PROJECT:	Edina Sports Dome
ARCHITECT:	Cunniffham Group
DRAWING DATE:	December 16, 2013

DESCRIPTION	Notes	Base Estimate	\$/sf 230,000
Construction Costs			
Demolition		\$28,000	\$0.12
Concrete		\$444,431	\$1.93
Masonry		\$284,568	\$1.24
Structural Steel	barrel vault roof	\$475,759	\$2.07
Rough Carpentry		\$155,132	\$0.67
Finish Carpentry/Millwork		\$21,117	\$0.09
Metal Panel & Metal Roof		\$208,950	\$0.91
Roofing		\$77,894	\$0.34
Joint Sealants		\$5,500	\$0.02
Doors, Frames, Hardware		\$20,146	\$0.09
Overhead Doors		\$22,500	\$0.10
Aluminum Entrances & Storefront		\$28,285	\$0.12
Gypsum Drywall		\$9,023	\$0.04
Tile		\$19,280	\$0.08
Acoustical Ceilings		\$0	\$0.00
Rubber Flooring		\$13,926	\$0.06
Painting		\$74,593	\$0.32
Miscellaneous Specialties		\$17,924	\$0.08
Dome	tedlar coating, bubble insul, LED lighting	\$1,481,927	\$6.44
Turf	FieldTurf XTHD-50 slit film 2"	\$380,220	\$1.65
Ice Rink Refrigeration / Dasher Board	temp chiller	\$1,517,250	\$6.60
Fire Protection		\$5,794	\$0.03
Plumbing		\$99,900	\$0.43
HVAC		\$42,500	\$0.18
Electrical	site lighting, radiant heat at players benches	\$1,202,000	\$5.23
Earthwork	soil correction 5' sub-cut \$112,000	\$1,436,379	\$6.25
Parking Lot		\$57,710	\$0.25
Access Roads		\$162,171	\$0.71
Site Concrete		\$115,000	\$0.50
Fire Pit		\$52,000	\$0.23
Retaining Walls		\$397,320	\$1.73
Landscaping & Irrigation		\$75,000	\$0.33
Site Utilities		\$188,294	\$0.82
Site Fence		\$28,950	\$0.13
Final Cleaning		\$5,000	\$0.02
General Conditions		\$387,932	\$1.69
General Liability Insurance		\$95,424	\$0.41
Builders Risk Insurance		\$4,626	\$0.02
Building Permit		\$96,761	\$0.42
Bond		\$0	\$0.00
Subtotal Construction Costs		\$9,739,186	\$42.34
Contingency		\$486,959	\$2.12
Contractors Fee		\$0	\$0.00
Total Construction Estimate		\$10,226,145	\$44.46
Owner Costs			
CM Fee	2.85%	\$291,445	\$1.27
Soil Borings	Allowance	\$15,000	\$0.07
Dome FFE	Allowance	\$100,000	\$0.43
Building FFE	Allowance	\$20,000	\$0.09
Technology	Allowance	\$100,000	\$0.43
Utility Relocation	Allowance	\$100,000	\$0.43
SAC/WAC	Allowance	\$15,000	\$0.07
Watershed	Allowance	\$3,000	\$0.01
Subtotal Owner Costs		\$644,445	\$2.80
Design Fees			
Arch. Design Fees	7.40%	\$756,735	\$3.29
Subtotal Design Fees		\$756,735	\$3.29
Contingency			
Owner Contingency	4%	\$409,046	\$1.78
Design Contingency	4%	\$409,046	\$1.78
Subtotal Contingency		\$818,092	\$3.56
Total Project Estimate		\$12,445,416	\$54.11



MINNEAPOLIS / PHOENIX / DENVER

October 8, 2013 Project Estimate

October 8, 2013

Edina Sports Dome, Outdoor Ice Sheet and Interior
Renovation of East Arena

Dome Layout (250' x 400' Dome)

	Quantities		Cost/Unit	Total
Dome foundations	1,300	LF	\$250	\$324,000
Dome (250' x 400')	100,000	SF	\$13.50	\$1,350,000
Synthetic turf field (Includes soil prep)	1	LS	\$926,000	\$926,000
Site hardscapes	1	LS	\$120,000	\$120,000
Mechanical/Electrical	100,000	SF	\$4	\$400,000
Landscaping	1	LS	\$40,000	\$40,000
Retaining walls	1	LS	\$80,000	\$80,000
Utilities	1	LS	\$100,000	\$100,000
Earthwork	1	LS	\$650,000	\$650,000
Accessory Building	2,500	SF	\$250	\$625,000
Storage and maintenance buildings	2,500	SF	\$100	\$250,000
Construction Contingency	5%			\$243,000
			Total	\$5,108,000

Outdoor Ice Sheet

	Quantities		Cost/Unit	Total
Earthwork	40,000	SF	\$5	\$200,000
Retaining walls	170	LF	\$650	\$110,500
Utilities	40,000	SF	\$4	\$160,000
Demo existing East Rink refrigeration system	1	LS	\$20,000	\$20,000
New indirect ammonia refrigeration system	1	LS	\$725,000	\$725,000
Concrete footing around rink	1	LS	\$22,000	\$22,000
Concrete paving around rink	6,600	SF	\$5	\$33,000
Outdoor concrete rink floor with subfloor heating system	1	LS	\$375,000	\$375,000
Exterior dasher boards with full boxes and glass	1	LS	\$160,000	\$160,000
Roof structure w/ fabric roof	24,200	SF	\$28	\$677,600
Covered walk-way w/ fabric roof	2,500	SF	\$80	\$200,000
Walk off mats	2,500	SF	\$22	\$55,000
Construction Contingency	5%			\$137,000
			Total	\$2,875,100

Interior Renovation of East Arena

	Quantities		Cost/Unit	Total
Demolition	2,500	SF	\$25	\$62,500
Locker/Changing Rooms (2) - renovation	1,800	SF	\$60	\$108,000
ADA compliant restrooms (2)	2	EA	\$40,000	\$80,000
Structural reinforcing	1	LS	\$50,000	\$50,000
Equipment room renovation	1	LS	\$150,000	\$150,000
Walk off mats	1,000	SF	\$22	\$22,000
Construction Contingency	5%			\$23,000

**Edina Sports Dome, Outdoor Ice Sheet and Interior
Renovation of East Arena**

Owner Costs

	Quantities		Cost/Unit	Total
A/E Fees	7.4%	LS		\$627,000
CM Fee	2.85%	LS		\$242,000
Soil Borings (Allowance)	1	LS	\$15,000	\$15,000
Dome FFE (Allowance)	1	LS	\$100,000	\$100,000
Building FFE (Allowance)	1	LS	\$20,000	\$20,000
Technology (Allowance)	1	LS	\$100,000	\$100,000
Utility Relocation (Allowance)	1	LS	\$100,000	\$100,000
SAC/WAC (Allowance)	1	LS	\$15,000	\$15,000
Watershed (Allowance)	1	LS	\$3,000	\$3,000
Owner Contingency	4%			\$339,000
Design Contingency	4%			\$339,000
			Total	\$1,900,000
			Total	\$10,378,600

The project estimates provided are based on conceptual development of facility size, components and location on site. The values that have been established are conceptual in nature, providing anticipated magnitude of costs based on historical construction cost information from previous facilities. Upon final design, bids will be received for all areas of work that will at that time provide more detailed and accurate construction costs.

Preliminary Construction Schedule

Line	Name	Duration	Start	Finish	2014												2015				
					Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	F			
					6	20	3	17	3	17	31	14	28	12	26	9	23	7	21	4	18
1	SD DD DESIGN	30d	1/2/2014	2/12/2014																	
2	SCHEMATIC DESIGN	7d	1/2/2014	1/10/2014																	
3	DESIGN DEVELOPMENT	23d	1/13/2014	2/12/2014																	
4	BID PACKAGE 1	49d	2/13/2014	4/22/2014																	
5	BP 1 DOCUMENTS	30d	2/13/2014	3/26/2014																	
6	95% BUDGET ESTIMATE	8d	2/27/2014	3/10/2014																	
7	95% BUDGET REVIEW		3/10/2014	3/10/2014																	
8	AUTHORIZE BP 1 BID		3/11/2014	3/11/2014																	
9	BP 1 BID ADVERTISEMENT	10d	3/12/2014	3/25/2014																	
10	BP 1 ISSUE		3/26/2014	3/26/2014																	
11	BP 1 BIDDING	10d	3/27/2014	4/9/2014																	
12	BP 1 BIDS DUE		4/10/2014	4/10/2014																	
13	BP 1 BID REVIEW	8d	4/11/2014	4/22/2014																	
14	BP 1 COUNCIL APPROVAL		4/22/2014	4/22/2014																	
15	BID PACKAGE 2	77d	2/13/2014	6/3/2014																	
16	BP 2 DOCUMENTS	58d	2/13/2014	5/5/2014																	
17	95% BUDGET ESTIMATE	12d	3/31/2014	4/15/2014																	
18	95% BUDGET REVIEW		4/15/2014	4/15/2014																	
19	AUTHORIZE BP 2 BID		4/22/2014	4/22/2014																	
20	BP 2 BID ADVERTISEMENT	10d	4/22/2014	5/5/2014																	



Date: 2/10/2014

Edina Sports Dome (ESD)

Preliminary Construction Schedule

Line	Name	Duration	Start	Finish	2014												2015													
					Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	F												
					6	20	3	17	3	17	31	14	28	12	26	9	23	7	21	4	18	1	15	29	13	27	10	24	8	22
21	BP 2 ISSUE		5/6/2014	5/6/2014																										
22	BP 2 BIDDING	10d	5/6/2014	5/19/2014																										
23	BP 2 BIDS DUE		5/20/2014	5/20/2014																										
24	BP 2 BID REVIEW	8d	5/21/2014	6/2/2014																										
25	BP 2 COUNCIL APPROVAL		6/3/2014	6/3/2014																										
26	CONSTRUCTION	154d	5/1/2014	12/5/2014																										
27	SOIL CORRECTIONS	20d	5/1/2014	5/29/2014																										
28	DOME CONSTRUCTION	80d	5/30/2014	9/19/2014																										
29	DOME ASPHALT ROADS	20d	9/1/2014	9/26/2014																										
30	DOME TURF	20d	9/15/2014	10/10/2014																										
31	DOME FABRIC	25d	10/13/2014	11/14/2014																										
32	OUTDOOR ICE SHEET ROOF STRUCTURE	80d	6/13/2014	10/3/2014																										
33	ACCESSORY BLDG	80d	6/13/2014	10/3/2014																										
34	TEMP ICE EQUIPMENT	45d	6/30/2014	9/1/2014																										
35	EAST ARENA ICE EQUIPMENT	55d	7/7/2014	9/19/2014																										
36	EAST ARENA INTERIOR RENOVATION	55d	7/7/2014	9/19/2014																										
37	PARKING LOT ASPHALT TRAILS	19d	9/23/2014	10/17/2014																										
38	SUBSTANTIAL COMPLETION		11/17/2014	11/17/2014																										
39	FINAL COMPLETION		12/5/2014	12/5/2014																										



Date: 2/10/2014

Edina Sports Dome (ESD)

Preliminary Construction Schedule



Updated Pamela Site Plan